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| Subject: MultiplicationDivision | | **Teacher:** | | **Grade Level:**Fourth | **Date(s):** October 3-7, 2016 | |
| **Curriculum Area:** Math | | | | **I Can Statements &Learning Targets** *(I can……..):*  I can use multiplication and division in 2 or more ways to solve the same problem. | | |
| **Content :** *Common Core Standards & Essential Standards*  **4.OA.2 –** Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.  **SPIRAL** - **4.OA.1 –** [Multiplication Fill In](https://docs.google.com/a/bryantschools.org/document/d/1TKU0Td85HfuDCwaMN2aokt9GTPLJm4_lQA29xI7w_Pk/edit?hl=en_US&pli=1) | | | | **Technology Standards &Resources:**  [**http://www.ncpublicschools.org/docs/acre/standards/new-standards/info-technology/gradek.pdf**](http://www.ncpublicschools.org/docs/acre/standards/new-standards/info-technology/gradek.pdf) **- Grade 4 - pgs. 9-10**  [Fourth Grade Tasks](http://3-5cctask.ncdpi.wikispaces.net/Fourth+Grade+Tasks)  [Mr. Anker Tests 4th Grade Activities](http://www.henryanker.com/4th_Activities.html) (Assessments)  <http://www.doe.k12.de.us/assessment/files/Math_Grade_4.pdf> - (Scrollfor specific standard)  Internet4Classrooms [Common Core Math Tasks](http://www.internet4classrooms.com/common_core/3rd_5th_math_tasks.htm)  IXL[Fourth Grade Math Skills](http://www.ixl.com/math/grade-4) - categorized | | |
| Essential Question(s): *(What question(s) should students be able to answer at the end of the lesson/unit?)*   * How does multiplication help us solve problems? * How can different strategies be helpful when solving a problem? | | | | **Higher Order Thinking/Revised Blooms:***(Questions that will enable students to find connections or extend learning.)*  Is additional information needed to solve a certain problem?  What would happen if …? | | |
| **Vocabulary:** *Academic/Content*  Division, Quotient, Remainder, Dividend, Divisor, Area models, Multiplicative comparison, Additive comparison  [Interactive Math Dictionary](http://www.amathsdictionaryforkids.com/) - Demonstrate with students | | | | **Teacher Resources:**  *Utilize Everyday Math Kits for some manipulatives – ie. Number decks, dice, base-10 blocks etc.*  [Math Unpacking Document](http://www.ncpublicschools.org/docs/acre/standards/common-core-tools/unpacking/math/4th.pdf)  [Standards for Mathematical Practice](http://www.corestandards.org/Math/Practice/)  [Blackline Masters](http://wps.ablongman.com/ab_vandewalle_math_6/0,12312,3547876-,00.html)  [Everyday Math Common Core Crosswalk](https://emccss.everydaymathonline.com/em-crosswalk/grades.php?grade=4) | | |
| **Monday**  **Subject Integration:** | **Whole Group**  [Sample Multiplication Sample Problems](https://docs.google.com/a/bryantschools.org/file/d/0B9vx0dToowQXZTRlYzkxYWYtOTJjZi00MDMxLTg3NzYtN2E4MTMxNmI2OGZm/edit?hl=en_US&pli=1)  Practice and produce. | | | **Small Group**  [More Multiplication Comparison Problems](https://docs.google.com/a/bryantschools.org/file/d/0B2ZmEgbHrS3GS09zQXIxT1k4b1k/edit?pli=1)  Create comparison problems with a partner and/or practice with flash cards. | | **Independent Work**  [Independent Practice: Multiplicative Comparison](http://www.helpingwithmath.com/printables/worksheets/word_problems/4oa2word_problems04.htm)  Solve problems by identifying number in each set.  (Prep) |
| **Tuesday**  **Subject Integration:** | **Whole Group**  To help students think of multiplication as repeated addition and division as repeated subtraction, have them use a **calculator** to either add or subtract groups one at a time. Students should keep track of how many times they add or subtract. Ex: 9x3=? 12x7=? 88÷11=? 72÷8=?  [The Doorbell Rang – A Division Story (online)](http://www.youtube.com/watch?v=BXtu90JnDkM) Discuss. | | | **Small Group**  Students model their own Doorbell Rang division problems. (Be creative – represent in book form/foldable) | | **Independent Work**  [Group of Dogs Game](http://www.beaconlearningcenter.com/WebLessons/GroupsOfDogs/default.htm) (Extra Practice)  Interactive story problem. |
| **Wednesday**  **Subject Integration:** | **Whole Group**–Number Tricks – Choose a number; add the next consecutive number, add 9, divide by 2, subtract your original number, subtract 4 (Answer will always be 1) Pose: “Why do you think the result is always 1?” Continue with real world story problems. | | | **Small Group**  [Reteach multiplication as comparison](http://www.helpingwithmath.com/printables/worksheets/equations_expressions/4oa1comparison01.htm)  (Guided practice) | | **Independent Work**  Web Lesson – [Camron’s Trip](http://www.beaconlearningcenter.com/WebLessons/CameronsTrip/default.htm)  Interactive story problem. |
| **Thursday**  **Subject Integration:** | **Whole Group**  [Learn Zillion video – Solve division problems using arrays](https://learnzillion.com/lessons/26-solve-division-problems-using-array)  Continue with guided practice. | | | **Small Group**  [Facts practice using multiplication and division triangles](http://www.readington.k12.nj.us/cms/lib07/NJ01000244/Centricity/Domain/295/mult_and_div_fact_triangles.pdf)  (Will need to prep) | | **Independent Work**  [HoodaMath](http://www.hoodamath.com/mobile/games/mathtimedtests.html)  Attend to Precision – timed practice |
| **Friday**  **Subject Integration:** | **Whole Group**  Read Aloud – A Remainder of One  [http://ws-na.amazon-adsystem.com/widgets/q?_encoding=UTF8&ASIN=0618250778&Format=_SL160_&ID=AsinImage&MarketPlace=US&ServiceVersion=20070822&WS=1&tag=k5matteares-20](http://astore.amazon.com/k5matteares-20?_encoding=UTF8&node=39) - [After listening to story solve problem](http://www.k-5mathteachingresources.com/support-files/aremainderofone.pdf) | | | **Small Group**  Have students solve problems involving division.  (Use supplemental materials)  Ex: If you have three for dinner and only two hamburgers. How will you divide them? What about five eaters and only four baked potatoes? (Everyone will eat – and they’ll be digesting fractions, and dividing too. | | **Independent Work**  [Division Derby](http://www.hoodamath.com/games/divisionderby.html)  Attend to Precision – timed practice  Above the Stove Math – Divide and double recipes. |
| **Reflection-Checking for Understanding**  Students in need of **remediation:**  **Action/Activities:**  Have students use sets of objects such as buttons or pennies to show that multiplication is combining equal sets and division is separating equal sets. | | | **Reflection-Checking for Understanding**  Students on **target:**  **Action/Activities:**  Challenge students to write a paragraph explaining how addition is related to multiplication and how subtraction is related to division. Students should give examples of each. | | | **Reflection-Checking for Understanding**  Students who need **enrichment:**  **Action/Activities:**  Challenge students to practice multiplication and division by using only the digits 3 and 5 and any of the four operations to write a number sentence that equals zero.  Extend to sentences that equal 1 through 5. |

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| **Common Standards for Mathematical Practices** - Make sense of problems and persevere in solving them; Reason abstractly and quantitatively; Construct viable arguments and critique the reasoning of others; Model with mathematics; Use appropriate tools strategically; Attend to precision; Look for and make use of structure; Look for and express regularity in repeated reasoning |